AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently amended) A method for identifying a compound that reduces production of a 4-hydroxy-2-alkylquinoline (HAQ) molecule, 4-hydroxy-2-heptylquinoline (HHQ) molecule, or a derivative or precursor thereof, said method comprising:

(a) contacting a *Pseudomonas* ~~pathogenic~~ cell with a compound; [[and]]

(b) measuring the production of a molecule selected from the group consisting of a HAQ molecule, HHQ molecule, ~~an 4-hydroxy-2-alkylquinoline (HAQ) molecule, 4-hydroxy-2-hepylquinoline (HHQ) molecule,~~ or a derivative or precursor thereof in said cell; and [[,]]

(c) comparing the production of said molecule in step (b) relative to production of said molecule by a cell not contacted with said compound, thereby identifying said compound that reduces production of said HAQ molecule, HHQ molecule, or a derivative or precursor thereof.

~~wherein said compound is identified as reducing production of said molecule relative to production of said molecule by a cell not contacted with said compound.~~

2. (Withdrawn) The method of claim 1, wherein step (b) comprises measuring the HAQ molecule.

3. (Original) The method of claim 1, wherein said pathogenic cell infects a mammal.

4. (Original) The method of claim 3, wherein said mammal is a human.

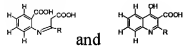
5. (Original) The method of claim 1, wherein said pathogenic cell infects a plant.

6. (Currently amended) The method of claim 1, wherein said <u>*Pseudomonas*</u> ~~pathogenic~~ cell is *Pseudomonas aeruginosa*.

7. (Previously presented) The method of claim 6, wherein said *Pseudomonas aeruginosa* is *Pseudomonas aeruginosa* PA14 or *Pseudomonas aeruginosa* PA01.

8. (Original) The method of claim 1, wherein said HAQ molecule, said HHQ molecule, or said derivative or precursor thereof is selected from any one of the molecules shown in Fig. 5 or Fig. 2.

9. (Withdrawn) The method of claim 8, wherein said molecule is selected from the group consisting of

 and .

10. (Withdrawn) The method of claim 1, wherein said HHQ is  .

11. (Withdrawn) A method for identifying a candidate compound for treating, reducing, or preventing a pathogenic infection, said method comprising:

(a) contacting a population of cultured pathogenic cells with a candidate compound;

(b) collecting supernatant from said population of cultured pathogenic cells;

(c) contacting said collected supernatant with a second population of cells expressing a PqsH protein;

(d) measuring production of HHQ in said population of cells, a candidate compound that reduces said production relative to HHQ production in a population of cells contacted with supernatant collected from a population of cells that has not been contacted with said candidate compound, identifying a candidate compound useful for treating, reducing, or preventing a pathogenic infection.

12. (Withdrawn) The method of claim 11, wherein said pathogenic cells infect mammals.

13. (Withdrawn) The method of claim 12, wherein said mammal is a human.

14. (Withdrawn) The method of claim 11, wherein said pathogenic cells infect plants.

15. (Withdrawn) The method of claim 11, wherein said pathogenic cells are *Pseudomonas aeruginosa*.

16. (Withdrawn) The method of claim 15, wherein said *Pseudomonas aeruginosa* is *Pseudomonas aeruginosa* PA14 or *Pseudomonas aeruginosa* PAO1.

17. (Withdrawn) The method of claim 11, wherein said PqsH protein is encoded by a nucleic acid molecule substantially identical to the nucleic acid of SEQ ID NO:6 or by a nucleic acid molecule that binds under stringent conditions to SEQ ID NO:6 or a sequence complementary thereto.

18. (Withdrawn) The method of claim 11, wherein said PqsH protein is substantially identical to the amino acid sequence of SEQ ID NO:13.

19. (Withdrawn) The method of claim 11, wherein said PqsH protein is a *Pseudomonas aeruginosa* PqsH protein.

20-55. (Cancelled)